

Application No. 10/069,036
Case No. FA 1058

LISTING OF CLAIMS:

Claims 1-11. (canceled)

Claim 12. (previously presented) An aqueous cleaning agent for ultrafiltration membranes in ultrafiltration units of electro-dipcoating plants comprising an electro-dipcoating lacquer binder, wherein the electro-dipcoating lacquer binder is overneutralized with a neutralizing agent corresponding to a degree of neutralization of the binder of at least 100 to 1000%.

Claim 13. (previously presented) The aqueous cleaning agent according to claim 12, further comprising up to 10 wt-% of an organic solvent.

Claim 14. (previously presented) The aqueous cleaning agent according to claim 13, wherein the organic solvent is a water-soluble solvent.

Claim 15. (currently amended) The aqueous cleaning agent according to claim 12, wherein the aqueous cleaning agent contains the electro-dipcoating lacquer binder in an amount ranging from 5 to 35 wt-% wt-%.

Claim 16. (currently amended) The aqueous cleaning agent according to claim 12, wherein the electro-dipcoating lacquer binder is selected from the group consisting of an anodic dipcoating lacquer binder and a cathodic electro-dipcoating lacquer binder.

Claim 17. (currently amended) The aqueous cleaning agent according to claim 16, wherein the anodic dipcoating lacquer binder ~~is selected from the group consisting of anodic dipcoating lacquer binders containing anionic groups and anodic dipcoating lacquer binders containing groups that have been converted into anionic groups,~~ wherein the resin has an acid number ranging from 35 to 300 mg KOH/g.

Application No. 10/069,036
Case No. FA 1058

- Claim 18. (previously presented) The aqueous cleaning agent according to claim 17, wherein the anodic dipcoating lacquer binder is selected from the group consisting of polyesters, epoxy resin esters, (meth)acrylic copolymer resins, maleate oils and polybutadiene oils.
- Claim 19. (previously presented) The aqueous cleaning agent according to claim 17, wherein the anodic dipcoating lacquer binder is self-crosslinking.
- Claim 20. (currently amended) The aqueous cleaning agent according to claim 17, wherein the anodic dipcoating lacquer ~~is the binder~~ further includes and a cross-linking agent.
- Claim 21. (currently amended) The aqueous cleaning agent according to claim 16, wherein the cathodic dipcoating lacquer binder ~~is selected from the group consisting of cathodic dipcoating lacquer binders containing cationic groups and basic groups that have been converted into cationic groups, wherein the resin has an amine number ranging from 20 to 250 mg KOH/g.~~
- Claim 22. (previously presented) The aqueous cleaning agent according to claim 21, wherein the cathodic dipcoating lacquer binder is selected from the group consisting of amino(meth)acrylic resins, aminopolyurethane resins, polybutadiene resins containing amino groups, aminoepoxy resins and epoxy resin-carbon dioxide-amine reaction products.
- Claim 23. (previously presented) The aqueous cleaning agent according to claim 21 wherein the cathodic dipcoating lacquer binder is self-crosslinking.

Application No. 10/069,036
Case No. FA 1058

- Claim 24. (currently amended) The aqueous cleaning agent according to claim 21, wherein the cathodic dipcoating lacquer ~~is the binder and~~ further includes a crosslinking agent.
- Claim 25. (previously presented) The aqueous cleaning agent according to claim 12, wherein the electro-dipcoating lacquer binder is an anodically depositable binder and the neutralizing agent is a base.
- Claim 26. (previously presented) The aqueous cleaning agent according to claim 25, wherein the neutralizing agent is selected from the group consisting of amine and amino alcohols.
- Claim 27. (previously presented) The aqueous cleaning agent according to claim 12, wherein the electro-dipcoating lacquer binder is a cathodically depositable binder and the neutralizing agent is an acid.
- Claim 28. (previously presented) The aqueous cleaning agent according to claim 27, wherein the neutralizing agent is selected from the group consisting of organic monocarboxylic acids and sulfonic acids.
- Claim 29. (currently amended) A process for cleaning electro-dipcoating ultrafiltration membranes comprising the step of circulating the aqueous cleaning agent of claim 12 through an ultrafiltration module of an electro-dipcoating lacquer ultrafiltration unit operated on an industrial scale at a throughput ranging from 2 to 20 m³ per hour, thereby cleaning the electro-dipcoating ultrafiltration membranes.
- Claim 30. (currently amended) The process according to claim 29, further comprising adding the aqueous cleaning agent to an electro-dipcoating bath subsequent to cleaning, wherein the electro-dipcoating bath comprises the same components as neutralizing agent as in the cleaning agent.

Application No. 10/069,036
Case No. FA 1058

- Claim 31. (new) The aqueous cleaning agent according to claim 13, further comprising between about 0 and 5 wt-% of the organic solvent.
- Claim 32. (new) The aqueous cleaning agent according to claim 31, further comprising up to 1 wt-% of an organic solvent.
- Claim 33. (new) The aqueous cleaning agent according to claim 14, wherein the water-soluble solvent is selected from glycol ethers or alcohols.
- Claim 34. (new) The aqueous cleaning agent according to claim 15, wherein the aqueous cleaning agent contains the electro-dipcoating lacquer binder in an amount ranging from 10 to 30 wt-%.
- Claim 35. (new) The aqueous cleaning agent according to claim 34, wherein the aqueous cleaning agent contains the electro-dipcoating lacquer binder in an amount ranging from 15 to 28 wt-%.
- Claim 36. (new) The aqueous cleaning agent according to claim 12, wherein the electro-dipcoating lacquer binder is an anodically depositable binder and the neutralizing agent is a base.
- Claim 37. (new) The aqueous cleaning agent according to claim 12, wherein the electro-dipcoating lacquer binder is a cathodically depositable binder and the neutralizing agent is an acid.
- Claim 38. (new) A process for cleaning at least one ultrafiltration membrane comprising rinsing the at least one ultrafiltration membrane with the aqueous cleaning agent according to claim 12.